



UNITED STATES PATENT AND TRADEMARK OFFICE

5r
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,750	12/08/2003	Xiangdong Chen	00750488AA)	9326
30743	7590	07/12/2005	EXAMINER	
WHITHAM, CURTIS & CHRISTOFFERSON, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190			NGUYEN, DAO H	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/728,750

Applicant(s)

CHEN ET AL.

Examiner

Dao H. Nguyen

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. In response to the communications dated 12/08/2003 through 03/10/2004, claims 1-20 are active in this application.

Drawings

2. The drawings are objected to for the following reasons.

Figure 1 is not designated by a legend such as "Prior Art". The Legend is necessary in order to clarify what applicant's invention is (see MPEP § 608.02g).

A proposed drawing correction or corrected drawings, showing changes in red ink, are required in reply to the Office Action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. However, formal correction of the noted defect(s) can be deferred until the application is allowed by the examiner (see MPEP § 608.02v).

Specification

3. The specification is objected to for the following reason:

In the specification, page 3, line 6-7, US Patent No. "5,539,368" should be corrected to --5,559,368-- as cited on page 5, line 8 of the pending specification,

because only US Patent No. 5,559,368 discusses about the figure illustrated as fig. 1 in the pending application.

On page 6, a close parenthesis, corresponding to an open parenthesis on line 25, is missing.

Appropriate correction(s) is/are required.

The specification has been checked to the extent necessary to determine the presence of possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

4. The claim is objected to because of the following reasons.

Claims 8 and 17 are word-by-word identical. Cancellation of one claim or appropriate correction is/are required.

In claim 16, the period "." at the end of line 2 should be deleted.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2818

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim(s) 1-5, 9-13, 16, and 18-20 are rejected under 35 U. S. C. § 102 (b) as being anticipated by U.S. Patent No. 5,689,144 to Williams.

Regarding claims 1 and 9, Williams discloses a field effect transistor, as shown in figs. 21-24, comprising

a transistor portion, or a plurality of transistor portions M1 comprising a source 200, drain 202 and gate 207 formed in a semiconductor layer 204 of a first conductivity type (p-type),

a body contact 210 to said semiconductor layer 204, and

a body control contact (D2 or 208) of a conductivity type (n-type) opposite said first conductivity type and interposed between said gate 207 and said body contact 210.

Regarding claim 18, Williams discloses a portable electronic device, as shown in figs. 21-14, comprising

a portable power supply, and an integrated circuit (see col. 1, lines 19-55), said integrated circuit comprising

a plurality of transistor portions M1 comprising a source 200, drain 202 and gate 207 formed in a semiconductor layer 204 of a first conductivity type (p-type),

Art Unit: 2818

a body contact 210 to said semiconductor layer 204, and
a body control contact (D2 or 208) of a conductivity type (n-type) opposite said first conductivity type and interposed between said gate 207 and said body contact 210.

Regarding claims 2, 10, and 19, Williams discloses the field effect transistor, further including a connection between said gate and said body control contact. See figs. 7, 12, 14, 16-20.

Regarding claims 3-4 and 11-12, Williams discloses the field effect transistor wherein said contact 210 to said semiconductor layer 204 is a region of said first conductivity type (p-type). See fig. 21.

Regarding claims 5 and 13, Williams discloses the field effect transistor wherein said contact to said semiconductor layer is connected to a low voltage opposite in polarity to a voltage applied to said field effect transistor. See col. 16, lines 12-55, and col. 18, lines 13-65.

Regarding claims 16 and 20, Williams discloses the portable electronic device wherein said plurality of transistor portions include a complementary transistor pair. See figs. 21-24; and col. 14, line 38 to col. 15, line 54.

Claim Rejections - 35 U.S.C. § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim(s) 8 and 17 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 5,689,144 to Williams, in view of the following remarks.

Regarding claims 8 and 17, Williams discloses all claimed limitations, except for specifically discuss about the thickness of the semiconductor layer being approximately 800Å and the body control contact extends approximately 300 Å to 350 Å.

However, it would have been an obvious to one of ordinary skill in the art that such layer(s) can be modified to any desired thickness, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Art Unit: 2818

9. Claim(s) 6-7 and 14-15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 5,689,144 to Williams, in view of Wollesen, U.S. Patent No. 6,627,952.

Regarding claims 6-7 and 14-15, Williams discloses the device comprising all claimed limitations, except for the semiconductor layer being formed on an insulator on a substrate, or being a silicon layer of a silicon-on-insulator substrate (SOI).

Wollesen discloses a field effect transistor, as shown in fig. 1, comprising field effect transistor (FET) and body contact formed on a silicon-on-insulator substrate (SOI).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Williams so that the FET and the body contact being formed on an SOI as that of Wollesen in order to save power. See col. 1, lines 24-38 of Wollesen.

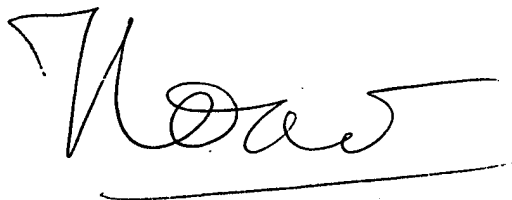
Conclusion

10. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

Art Unit: 2818

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao H. Nguyen whose telephone number is (571)272-1791. The examiner can normally be reached on Monday-Friday, 9:00 AM – 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax numbers for all communication(s) is 703-872-9306, or 571-273-8300 for communication(s) after July 15, 2005.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1625.



Dao H. Nguyen
Art Unit 2818
July 9, 2005



David Nelms
Supervisory Patent Examiner
Technology Center 2800